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5/28/02

<110> Wesche, Holger
Li, Shyun
Tularik Inc.

<120> IRAK-4: Compositions and Methods of Use

<130> 018781-003910US

<140> US 09/759,595

<141> 2001-01-11

<150> US 60/176,395

<151> 2000-01-13

<160> 7

<170> PatentIn Ver. 2.1

<210> 1

<211> 460

<212> PRT

<213> Homo sapiens

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Lys Lys Leu Ala Val Ala Ile Lys Lys Pro Ser Gly Asp Asp Arg Tyr
35 40 45

Asn Gln Phe His Ile Arg Arg Phe Glu Ala Leu Leu Gln Thr Gly Lys
50 55 60

Ser Pro Thr Ser Glu Leu Leu Phe Asp Trp Gly Thr Thr Asn Cys Thr
65 70 75 80

Ala Gly Asp Leu Val Asp Leu Leu Ile Gln Asn Glu Phe Phe Ala Pro
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Ala Ser Leu Leu Leu Pro Asp Ala Val Pro Lys Thr Ala Asn Thr Leu
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Pro Ser Lys Glu Ala Ile Thr Val Gln Gln Lys Gln Met Pro Phe Cys
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Asp Lys Asp Arg Thr Leu Met Thr Pro Val Gln Asn Leu Glu Gln Ser
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Tyr Met Pro Pro Asp Ser Ser Ser Pro Glu Asn Lys Ser Leu Glu Val
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Gly Glu Gly Gly Phe Gly Val Val Tyr Lys Gly Tyr Val Asn Asn Thr
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 Thr Val Ala Val Lys Lys Leu Ala Ala Met Val Asp Ile Thr Thr Glu
 210 215 220
 Glu Leu Lys Gln Gln Phe Asp Gln Glu Ile Lys Val Met Ala Lys Cys
 225 230 235 240
 Gln His Glu Asn Leu Val Glu Leu Leu Gly Phe Ser Ser Asp Gly Asp
 245 250 255
 Asp Leu Cys Leu Val Tyr Val Tyr Met Pro Asn Gly Ser Leu Leu Asp
 260 265 270
 Arg Leu Ser Cys Leu Asp Gly Thr Pro Pro Leu Ser Trp His Met Arg
 275 280 285
 Cys Lys Ile Ala Gln Gly Ala Ala Asn Gly Ile Asn Phe Leu His Glu
 290 295 300
 Asn His His Ile His Arg Asp Ile Lys Ser Ala Asn Ile Leu Leu Asp
 305 310 315 320
 Glu Ala Phe Thr Ala Lys Ile Ser Asp Phe Gly Leu Ala Arg Ala Ser
 325 330 335
 Glu Lys Phe Ala Gln Thr Val Met Thr Ser Arg Ile Val Gly Thr Thr
 340 345 350
 Ala Tyr Met Ala Pro Glu Ala Leu Arg Gly Glu Ile Thr Pro Lys Ser
 355 360 365
 Asp Ile Tyr Ser Phe Gly Val Val Leu Leu Glu Ile Ile Thr Gly Leu
 370 375 380
 Pro Ala Val Asp Glu His Arg Glu Pro Gln Leu Leu Leu Asp Ile Lys
 385 390 395 400
 Glu Glu Ile Glu Asp Glu Glu Lys Thr Ile Glu Asp Tyr Ile Asp Lys
 405 410 415
 Lys Met Asn Asp Ala Asp Ser Thr Ser Val Glu Ala Met Tyr Ser Val
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<213> Homo sapiens

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 Lys Lys Leu Ala Val Ala Ile Lys Lys Pro Ser Gly Asp Asp Arg Tyr
 35 40 45
 Asn Gln Phe His Ile Arg Arg Phe Glu Ala Leu Leu Gln Thr Gly Lys
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 Ser Pro Thr Cys Glu Leu Leu Phe Asp Trp Gly Thr Thr Asn Cys Thr
 65 70 75 80
 Val Gly Asp Leu Val Asp Leu Leu Val Gln Ile Glu Leu Phe Ala Pro
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 115 120 125

Glu Lys Asp Arg Thr Ser Val Met Pro Met Pro Lys Leu Glu His Ser
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 Cys Glu Pro Pro Asp Ser Ser Ser Pro Asp Asn Arg Ser Val Glu Ser
 145 150 155 160
 Ser Asp Thr Arg Phe His Ser Phe Ser Phe His Glu Leu Lys Ser Ile
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 Thr Asn Asn Phe Asp Glu Gln Pro Ala Ser Ala Gly Gly Asn Arg Met
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 Gly Glu Gly Gly Phe Gly Val Val Tyr Lys Gly Cys Val Asn Asn Thr
 195 200 205
 Ile Val Ala Val Lys Lys Leu Gly Ala Met Val Glu Ile Ser Thr Glu
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 Glu Leu Lys Gln Gln Phe Asp Gln Glu Ile Lys Val Met Ala Thr Cys
 225 230 235 240
 Gln His Glu Asn Leu Val Glu Leu Leu Gly Phe Ser Ser Asp Ser Asp
 245 250 255
 Asn Leu Cys Leu Val Tyr Ala Tyr Met Pro Asn Gly Ser Leu Leu Asp
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 Arg Leu Ser Cys Leu Asp Gly Thr Pro Pro Leu Ser Trp His Thr Arg
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 Cys Lys Val Ala Gln Gly Thr Ala Asn Gly Ile Arg Phe Leu His Glu
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 Asn His His Ile His Arg Asp Ile Lys Ser Ala Asn Ile Leu Leu Asp
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 355 360 365
 Asp Ile Tyr Ser Phe Gly Val Val Leu Leu Glu Leu Ile Thr Gly Leu
 370 375 380
 Ala Ala Val Asp Glu Asn Arg Glu Pro Gln Leu Leu Leu Asp Ile Lys
 385 390 395 400
 Glu Glu Ile Glu Asp Glu Glu Lys Thr Ile Glu Asp Tyr Thr Asp Glu
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 Lys Met Ser Asp Ala Asp Pro Ala Ser Val Glu Ala Met Tyr Ser Ala
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cDNA

<220>
<221> CDS
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<210> 5
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:sense primer
for amplification of human IRAK-4

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<210> 6
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<212> DNA
<213> Artificial Sequence

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primer for amplification of human IRAK-4

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